

CLAIMS

1. A method of manufacturing a cordierite porous body using a cordierite forming material including an Al source, an Si source, and an Mg source and forming
5 cordierite by firing,

characterized in that an inorganic micro balloon containing SiO_2 and Al_2O_3 is used as a part or all of the Al source and the Si source.

2. The method of manufacturing the cordierite
10 porous body according to claim 1, wherein a crush strength of the inorganic micro balloon, measured by a micro compression tester, is 1 MPa or more.

3. The method of manufacturing the cordierite porous body according to claim 1 or 2, wherein a moisture
15 content of the inorganic micro balloon is 0.1% by mass or less.

4. The method of manufacturing the cordierite porous body according to any one of claims 1 to 3, wherein the inorganic micro balloon is obtained by calcining at
20 300°C or more.

5. The method of manufacturing the cordierite porous body according any one of claims 1 to 4, wherein a total content of the Si source and the Al source included in the inorganic micro balloon with respect to the whole
25 inorganic micro balloon is 90% by mass or more, when the Si source is converted to SiO_2 , and the Al source is converted to Al_2O_3 .

6. The method of manufacturing the cordierite porous body according to any one of claims 1 to 5, wherein a total content of a sodium compound and a potassium compound included in the inorganic micro balloon with the whole inorganic micro balloon is 0.2 to 2% by mass, when the sodium compound is converted to Na_2O , and the potassium compound is converted to K_2O .

7. The method of manufacturing the cordierite porous body according to any one of claims 1 to 6, wherein a melting point of the inorganic micro balloon is 1400 to 1650°C.

8. The method of manufacturing the cordierite porous body according to any one of claims 1 to 7, wherein a tap density of the inorganic micro balloon is 0.5 g/cm³ or less.

9. The method of manufacturing the cordierite porous body according to any one of claims 1 to 4, wherein talc is used as a part or all of the Mg source.

10. The method of manufacturing the cordierite porous body according to any one of claims 1 to 9, wherein aluminum hydroxide ($\text{Al}(\text{OH})_3$) is used as a part or all of the Al source except the inorganic micro balloon in a case where the inorganic micro balloon is used as a part of the Al source.

11. The method of manufacturing the cordierite porous body according to any one of claims 1 to 9, wherein 20 to 52% by mass of kaolin with respect to an amount of

the inorganic micro balloon is used as a part or all of the Al source except the inorganic micro balloon in a case where the inorganic micro balloon is used as a part of the Al source.